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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,574	04/14/2004	Shikio Yoshida	2936-0216PUS1	4815
2292	7590	08/25/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			LU, ZHIYU	
			ART UNIT	PAPER NUMBER
			2618	

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/823,574	YOSHIDA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Zhiyu Lu	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 14 April 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-2 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is a confusing phrase “a length direction of...” used in claims 1-2 and 9.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Yokoki (JP2001-028560).

Regarding claim 1, Yokoki anticipates a wireless transmission/reception card comprising:

a pole-shaped antenna;

a transmitter/receiver that is connected to the pole-shaped antenna, wherein a length direction of the pole-shaped antenna is substantially parallel to a main face of the wireless transmission/reception card.

The above limitations are admitted by Applicants as prior art in Fig. 9A and paragraphs 0006-0009 of the published application.

Regarding claim 2, Yokoki anticipates a wireless transmission/reception card supporting apparatus comprising:

a mount on which a wireless transmission/reception card is mounted,  
said wireless transmission/reception card comprises a pole-shaped antenna and a transmitter/receiver that is connected to the pole-shaped antenna, a length direction of the pole-shaped antenna being substantially parallel to a main face of the wireless transmission/reception card, and

wherein, when the wireless transmission/reception card is mounted on the mount, the pole-shaped antenna of the wireless transmission/reception card is set upright substantially in a vertical direction in a normal use state.

The above limitations are admitted by Applicants as prior art in Fig. 9B and paragraphs 0006-0009 of the published application.

Regarding claim 6, Yokoki anticipates the limitation of claim 2.

Yokoki also anticipates the wireless transmission/reception card supporting apparatus is an electric appliance (inherent).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoki (JP2001-028560) in view of Eastman et al. (US Patent#5208449).

Regarding claim 3, Yokoki teaches the limitation of claim 2.

But, Yokoki does not expressly disclose the wireless transmission/reception card supporting apparatus is a headset.

Eastman et al. teaches a mountable wireless transceiver (44 of Fig. 1) used on a headset (Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mount of the wireless transmission/reception card of Yokoki into mountable on the headset of Eastman et al., in order to utilize wireless communication.

Regarding claim 9, Eastman et al. teach a wireless network terminal comprising:

a wireless transmission/reception card (44 of Fig. 1);

a headset (10 of Fig. 1); and

an electric appliance (28 of Fig. 1),

said wireless transmission/reception card comprises a pole-shaped antenna (52 of Fig. 1)

and a transmitter/receiver that is connected to the pole-shaped antenna (column 3 lines 1-7), and

said headset includes a mount on which the wireless transmission/reception card is mounted (column 2 lines 64-66), the pole-shaped antenna of the wireless transmission/reception card being set upright substantially in a vertical direction in a normal use state when the wireless transmission/reception card is mounted on the mount (Fig. 1),

wherein the headset and the electric appliance have communication interfaces compatible with each other (inherent).

But, Eastman et al. do not expressly disclose a length direction of the pole-shaped antenna being substantially parallel to a main face of the wireless transmission/reception card.

Yokoki teaches a length direction of the pole-shaped antenna being substantially parallel to a main face of the wireless transmission/reception card (Fig. 9A of Applicant's published application).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate foldable antenna taught by Yokoki into the wireless network terminal of Eastman et al., in order to make the wireless headset space efficient.

4. Claims 5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoki (JP2001-028560) in view of Eastman et al. (US Patent#5208449) and Maki (US Patent#5884199).

Regarding claims 5, 8 and 11, Yokoki and Eastman et al. teach the limitations of claims 3, 6 and 9.

Eastman et al. also teach wherein said headset includes a pair of earpieces, a bridge that couples together the earpieces in such a way as to bridge over a head of a user in the normal use state (Fig. 1).

But, Yokoki and Eastman et al. do not expressly disclose a patch antenna arranged in the bridge. Maki teaches a patch antenna arranged in the bridge of a wireless headset (3 of Fig. 2, column 3 lines 28-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate patch antenna on the bridge of wireless headset taught by Maki into the modified wireless headset of Yokoki and Eastman et al., in order to achieve line of sight communication efficiency.

5. Claims 4, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoki (JP2001-028560) in view of Eastman et al. (US Patent#5208449) and Rydbeck (US Patent#5590416).

Regarding claims 4, 7 and 10, Yokoki and Eastman et al. teach the limitations of claims 3, 6 and 9.

But, Yokoki and Eastman et al. do not expressly disclose the mount is rotatable. Rydbeck teaches a rotatable mount for an antenna (column 2 lines 28-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mount of the transceiver of Yokoki and Eastman et al. into rotatable taught by Rydbeck, in order to achieve efficient signal reception.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zhiyu Lu whose telephone number is (571) 272-2837. The examiner can normally be reached on Weekdays: 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vuong Quochien can be reached on (571) 272-7902. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Zhiyu Lu *lu*  
August 9, 2006

*Quochien B. Vuong 8/18/06*  
QUOCHIEN B. VUONG  
PRIMARY EXAMINER